

RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

March 26, 2008

OIL AND GAS DOCKET NO. 10-0255776

APPLICATION OF LAREDO PETROLEUM, INC. FOR A NEW FIELD DESIGNATION FOR THE BEGERT (10,200) FIELD AND ADOPT TEMPORARY FIELD RULES FOR THE BEGERT (10,200) FIELD, HEMPHILL COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E.

DATE OF HEARING: March 26, 2008

APPEARANCES:

Mickey R. Olmstead, Attorney Thomas (Buddy) Richter, P.E. REPRESENTING:

Laredo Petroleum, Inc.

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Laredo Petroleum, Inc. for a new field designation, the Begert (10,200) Field and to adopt temporary field rules as follows:

- The entire combined correlative interval from 10,200' to 13,490' as shown on the Schlumberger Platform Express Array Induction-SP Gamma Ray log of the Laredo Petroleum, Begert Trust 3 Well No. 1 (API No. 42-211-34050), Hemphill County, Texas, should be designated as the Begert (10,200) Field.
- Minimum well spacing of 467'/1200' (leaseline/between well);
- 3. 640 acre gas proration units with 10% tolerance and a maximum diagonal of 8,500'; and
- 4. An allocation formula based on 95% deliverability and 5% acreage and suspension of the allocation formula.

It is further requested that any over-production be canceled. The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The proposed Begert (10,200) Field was discovered by completion of the Laredo Petroleum, Begert Trust 3 Well No. 1 through four sets of perforations in the gross interval from 11,224' to 13,061' on January 28, 2008. This perforated interval is contained within the Granite Wash and Atoka formations only. The well potentialed at 1,321 MCFGPD. The gas gravity is .687° and the condensate gravity is 62.0°API. The calculated bottomhole pressure is 4,063 psia at 174°F.

A new field designation is appropriate as there are no active or inactive Cleveland, Granite Wash or Atoka wells within 2.5 miles of the discovery well. The only well to have produced from the Granite Wash was drilled and plugged after a couple of months production in 1979 and was located 2.5 miles to the southwest. Five other wells were drilled deep enough to test the subject formations but were plugged as dry holes between 1974 and 1995.

It is proposed that the entire combined correlative interval from 10,200' to 13,490' as shown on the Schlumberger Platform Express Array Induction-SP Gamma Ray log of the Laredo Petroleum, Begert Trust 3 Well No. 1 (API No. 42-211-34050), Hemphill County, Texas, should be designated as the Begert (10,200) Field. The proposed correlative interval is appropriate for completion purposes and will encompass the Cleveland, Granite Wash and Atoka Formations. All three formations contain sand and shale sequences that are not stand alone reservoirs, but the Granite Wash and Atoka are the primary pay intervals. Well completions in the consolidated section will allow for timely completions in those zones where sands are present, which in effect lowers the economic producing limit for all the zones and will increase the ultimate recovery from each member. Numerous downhole commingling exceptions have been approved in several Granite Wash and Atoka fields.

Proration unit density of 640 acres is necessary for the efficient and effective depletion of the reservoirs. Laredo Petroleum has completed three wells in the subject field area and is in the process of completing two additional wells. There are several Granite Wash Fields in this area of District 10. Analogous fields and wells were reviewed for reservoir and production tendencies for estimating volumetrics and production declines to determine the estimated ultimate recovery (EUR) and drainage area. Reservoir parameters are average porosity of 10%, average water saturation of 52% and average net pay of 50 feet. The calculated recoverable gas-in-place is 9.369 MCF/Ac. The EUR for the Begert Trust 3 Well No. 1 is 4.2 BCFG and the calculated drainage area is 450 acres. The EUR for the Begert Trust 4 Well No. 1 is 3.6 BCFG and the calculated drainage area is 382 acres.

Minimum well spacing of 467'-1200' (leaseline/between well) will provide flexibility in locating wells in the subject field. Cross section analysis indicates that individual sand lenses are primarily limited in areal extent, although some sand member appear to be correlative between wells. As the area is developed, additional data will be reviewed. The

proposed field rules spacing and density have been adopted for numerous other Granite Wash reservoirs and are appropriate on a temporary basis until additional reservoir and production data is accumulated and reviewed.

A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. Since most of the individual sands are limited in areal extent, the ultimate recovery is determined by sand quality and not by assigned acreage. Therefore, Laredo proposed a two-factor allocation formula for gas wells based on 95% deliverability and 5% acreage to satisfy both of the above statements. In addition, the allocation formula should be suspended as there is a 100% market for all the gas produced from the field.

FINDINGS OF FACT

- 1. Notice of this hearing was sent to all operators in the subject field at least ten (10) days prior to the subject hearing.
- 2. There was no protest at the call of the hearing.
- 3. The proposed Begert (10,200) Field was discovered by completion of the Laredo Petroleum, Begert Trust 3 Well No. 1 through four sets of perforations in the gross interval from 11,224' to 13,061' on January 28, 2008.
 - a. A new field designation is appropriate as there are no active or inactive Cleveland, Granite Wash or Atoka wells within 2.5 miles of the discovery well.
 - b. The only well to have produced from the Granite Wash was drilled and plugged after a couple of months production in 1979 and was located 2.5 miles to the southwest.
- 4. The entire combined correlative interval from 10,200' to 13,490' as shown on the Schlumberger Platform Express Array Induction-SP Gamma Ray log of the Laredo Petroleum, Begert Trust 3 Well No. 1 (API No. 42-211-34050), Hemphill County, Texas, should be designated as the Begert (10,200) Field.
 - a. The interval will encompass the Cleveland, Granite Wash and Atoka Formations.
 - b. The Granite Wash and Atoka are the primary pay intervals and are sand and shale sequences that are not stand alone reservoirs.
 - c. Well completions in the consolidated section will allow for timely completions in those zones where sand members are present, which

in effect lowers the economic producing limit for all the zones and will increase the ultimate recovery from each member.

- 5. Proration unit density of 640 acres is necessary for the efficient and effective depletion of the reservoirs.
 - a. Analogous fields and wells were reviewed for reservoir and production performance to determine their volumetric reserves and production declines. This information was then used to calculate the ultimate recovery (EUR) and drainage area for the wells in the Begert (10,200) field.
 - b. The EUR for the Begert Trust 3 Well No. 1 is 4.2 BCFG and the calculated drainage area is 450 acres.
 - c. The EUR for the Begert Trust 4 Well No. 1 is 3.6 BCFG and the calculated drainage area is 382 acres.
- 6. Minimum well spacing of 467'-1200' (leaseline/between well) will provide flexibility in locating wells in the subject field.
- Most of the individual sands are limited in areal extent, so the ultimate recovery is primarily determined by sand quality and not by assigned acreage.
- 8. A multi-factor allocation formula is necessary for the protection of correlative rights pursuant to State Statutes. The proposed two-factor allocation formula for gas wells based on 95% deliverability and 5% acreage satisfies this requirement.
- 9. The allocation formula should be suspended as there is a 100% market for all of the gas from the Begert (10,200) field.

CONCLUSIONS OF LAW

- 1. Proper notice was given to all parties as set out in the provisions of all applicable codes and regulatory statutes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Consideration for new field designation and temporary field rules and appropriate actions is a matter within the Commission jurisdiction.

4. Approval of the proposed new field designation and adoption of temporary field rules will prevent waste, foster conservation and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends approval of the proposed new field designation and temporary field rules for the Begert (10,200) Field subject to Commission review in eighteen (18) months.

Respectfully submitted,

Richard D. Atkins, P.E.

Technical Examiner